SEPARATED PROCUREMENT OF FCR AND AFRR PRODUCTS: CONSULTATION REPORT

ELIA

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1. Introduction

ELIA has been studying the possible evolutions of the FCR and aFRR procurement schemes in Belgium, and in particular whether the current design – where FCR and (upward and downward) aFRR are procured jointly – remains needed in the future.

The current situation has therefore been compared to alternative designs where FCR and aFRR are procured in distinct processes, and where the procurement of upward and downward aFRR products is also separated. The study analyzed different inter-related design elements at stake, namely:

- The pros and cons of a separation of (local) FCR and aFRR products,
- The option to source all FCR via the regional FCR cooperation,
- The frequency, dependencies and timing options of the various auctions and
- The pros and cons of a separation of upward and downward aFRR sourcing (where also other approaches pursuing the same objective of limiting barriers to entry are discussed).

These different design elements were then combined into a sequence of implementation steps, as a starting point for a dialogue with the relevant stakeholders.

Stakeholders have been invited to provide their feedback on the document during a consultation which was held between the 20 April and 22 May 2018.

This consultation report summarizes the key messages received during the consultation, as well as the responses and positions of ELIA thereon. It supports an updated final version of the study, where these additional views have been taken into account.

2. Contributions

ELIA received five contributions during the consultation. Four respondents declared that their responses to this consultation are non-confidential. They have consequently been made available on Elia website.

ELIA received non-confidential contributions from:

- FEBELIEC
- FEBEG
- RESTORE
- RENT A PORT

A fifth respondent has required his responses to be considered anonymously. His responses will be labelled as “Anonymous Respondent”.

ELIA would like to thank the respondents, as well as the stakeholders who participated to the ad hoc workshop on this topic on 9 May 2018, for their analysis and contributions to our attempt to improve the Belgian balancing market design.

3. Discussion

For the key topics for which feedback has been received, a summary of the stakeholders’ views is presented, as well as the points of view and feedback of ELIA. Where appropriate, we also indicate the changes in the final report that will be implemented as a consequence of these remarks.

3.1. Separation of FCR and aFRR procurement

3.1.1. On the principle of a separation

Although with some nuances, FEBEG, Rent A Port, Restore and the Anonymous Respondent evaluate the future split of the FCR and aFRR procurement markets (and related initiatives by Elia) as a step in the right direction, and thus agree with Elia on the target model for separate FCR and aFRR (symmetric) procurement.

On the other side, the combined auction of FCR and aFRR remains at this point the preferred option for Febeliec, even though Febeliec is definitely not opposed to separate procurement from the moment where liquidity in both markets has increased sufficiently to avoid mono- or oligopolistic bidding behavior.

Based on this input, ELIA confirms its willingness to split FCR and aFRR procurement when certain preconditions are met (as explained below and in the report).

3.1.2. Chicken and eggs

Febeliec refers to the chicken and eggs dilemma and is not convinced to see sufficient liquidity – especially in the aFRR market – arising in the near future to allow moving in the short term to a separate procurement of FCR and aFRR. Nevertheless, Febeliec agrees that facilitation of the market for new entrants in order to foster competition is very important and thus rather follows the option presented by Elia where a gradual and step-wise approach is taken to evolve towards the European target, with specific Belgian temporary exemptions for products in the near term and interim solutions to alleviate some concerns. Febeliec thus follows Elia in its suggestion to wait for the availability of a

sufficient volume of new assets before separating the local FCR procurement from aFRR, as currently CCGTs are inevitable for aFRR and are an important source of competition for FCR (Febeliec would also like to remark that at this point, aFRR is provided only by CCGTs by design, as only CIPU-units can provide aFRR).

The Anonymous Respondent takes the other side of the chicken and egg dilemma and notes a strong reluctance in truly opening the R2 market. Although it is likely that there might be a transition period with higher prices when opening the markets, this can only – according to this Respondent – attract more units to deliver the service and drop prices in the longer-term. He thus believes there is no other way to resolve the chicken-and-egg-problem than by removing the market barriers in one go. The Anonymous Respondent emphasizes that low competition on the R2 market is due to the fact that it is almost impossible for any technology but CCGTs to offer on the market for R2 in Belgium, since the market is explicitly designed for CCGTs.

FEBEG also confirms that a separation of the FCR and aFRR procurement will lead to a price increase of the aFRR offers as more (fixed/startup) costs will be attributed to the aFRR offers. On the other hand, the price of FCR offers will (artificially) lower if procured after the aFRR selection. This might in term make the aFRR more attractive for new entrants and stimulate investments in new technologies. This might also make Belgian assets more competitive on the regional FCR platform.

RENT A PORT understands that Elia preconditions the R1/R2 split to the demonstrability that CCGTs can be completely avoidable (see also explanation above) in the delivery of FCR. However, RENT A PORT believes that Elia should provide the necessary transparency on the indicators that Elia will use for demonstrating this avoidability, the targeted values of these indicators establishing this avoidability and ask for frequent reporting on the evolution of these indicators. ELIA's interpretation of this later sentence – given the clearly favorable opinion of RENT A PORT on the separation of FCR-aFRR procurements – is that these indicators allow to properly monitor the pre-conditions set by ELIA with the objective to strive for a quicker implementation.

REstore and the Anonymous Respondent ask Elia to implement as soon as possible the split between FCR and aFRR procurement, without waiting for any further market development.

REstore also clearly depict the lack of transparency in the current price formation, leading a competitive advantage for CCGTs and reduced competition (because competition with combined bids from players between markets of which one is not accessible (R2

market) is inadequate). Restore, the Anonymous Respondent and FEBEG plead that the separation of the FCR and aFRR auctions will increase the transparency and the confidence in the (bid) selection made by Elia.

Generally speaking, ELIA kindly observes that most of the remarks of the respondents have already been duly considered in the draft study.

About the so-called “chicken and egg” problem, ELIA’s confirms its willingness to implement a progressive approach towards market improvement, where temporary increases of procurement costs are mitigated. In this respect, ELIA understands the concern of REstore and the Anonymous Respondent about transparency in the current price formation, and recognizes the complexity and the implied drawbacks of the current approach, but still value that this approach leads to the lowest overall sourcing costs. Elia also notes that BSPs have always the option to be active in the FCR Cooperation market in case they are not selected in the local market. There the price formation is simpler, prices are relatively stable. This should allow taking investment decisions with low risk.

Unfortunately, ELIA does not see a set of clear and indisputable indicators that can mechanically trigger the separation of FCR and aFRR procurement schemes at this point, as notably requested by RENT A PORT. ELIA will also envisage the possibility to implementation the separation of FCR and aFRR procurement at a fixed moment in time, once such market design pre-requisites are in place or an evolution towards this direction is clearly visible.

3.2. FCR local products and regional auction

FEBEG agrees that separate procurement of FCR and aFRR can only take place when there is enough liquidity in the FCR market and proposes to that end to abandon the multiple products for FCR and only maintain the European standard 200mHz FCR product.

Its argument is that this would improve bidding and selection conditions and the transfer from remaining offers from the Belgian platform to the regional platform[1].

On the contrary, Febeliec is a proponent of the Belgian approach with multiple (non-symmetrical) products, in order to mitigate the liquidity issue in the Belgian market. For Febeliec, it is of the utmost importance to continue this approach and thus apply for exemptions, as long as the liquidity in the FCR market has not substantially improved through the participation of new entrants. Moreover, Febeliec is not as convinced as Elia that the absence of local (asymmetrical) products should be compensated by the benefits of a procurement of all Belgian FCR needs via the FCR regional cooperation.

FEBEG mentions the recent procurement result (3 weeks during the consultation period) that show that more than the minimal 30 % of the required FCR volumes are procured within the Belgian balancing zone. This indicates that full cost benefits of passing to a full regional procurement are not that straightforward as presented in the study and should with this new experience, be reviewed.

ELIA does not understand FEBEG's argument that abandoning the local products and only maintain 200mHz FCR product at a local auction is beneficial (except maybe that it enables to maintain a different auction frequency, which is not viewed by all stakeholder as preferable). On the contrary, ELIA considers the offering of local asymmetric product as the benefit of an intermediate step where FCR reserves are procured locally (and separately from aFRR) as it develops much more the local liquidity. The liquidity of the regional market appears already much less problematic and the additional benefits claimed by FEBEG for this regional market are not seen as decisive. In addition, note that ELIA already implicitly took into account in its current calculations (see report) the fact that more than 30% of Belgian FCR needs could be procured locally (since real volumes and prices have been used).

Elia has considered the argument of recent evolutions in FCR market and has updated the final report accordingly (chapters 3.2 and 4.2).

[1] its claim is that, today, partially selected symmetric 100mHz products hinder to offer the remaining capacity as a 200mHz product to the European platform, and that a simplification of the FCR products will therefore lead to a liquidity increase in both the Belgian as the regional platform

3.3. Separation of R2-Up and R2-Down procurement

3.3.1. On the principle of a separation

FEBEG does not see the economic benefits of asymmetric procurement of aFRR as combined offers can be the cheapest ones for Elia. FEBEG misses an analysis (costs/benefits) showing a positive case for the asymmetric procurement[2]. FEBEG also observes that the aFRR non-CIPU pilot project has shown the difficulties to implement aFRR with non-CIPU resources. FEBEG confirms that a separation of aFRR-up and aFRR-down will lead to a price increase although the cost structure does not. The same (fixed/startup) costs will be attributed twice to the separate aFRR-up and aFRR-down offers as there exists an uncertainty that both offers would be selected. An exemption of the European guideline in that regard seems to be an economically sound and appropriate measure for Belgium, according to FEBEG.

Febeliec agrees to request a temporary exemption to procure up- and downward aFRR reserves separately, to avoid double-counting of spinning costs, which would have a negative impact on short-term sourcing costs.

The Anonymous Respondent has the opposite opinion and refers to the example of the study (p.25) to justify its point of view: in case of CSS<0, CCGT can offer 20 MW R2 up at a price of 300€ in the example. But – according to this respondent – the study then makes the wrong assumption that only the CCGT will offer R2 down, which would increase the overall costs. Yet, if in the end the idea of the study is that other market parties can now offer R2-Down, then the Anonymous Respondent argues that it is reasonable to estimate that the 20MW of R2-Down can be offered at a lower cost than 300€. This would then result in total costs below the 600€ mentioned in the study, while a first step towards a competitive market is taken. This Respondent therefore would like the conclusion of the study to be corrected, stating that asymmetrical R2 products are beneficial both for CSS>0 and CSS<0. More generally, this Respondent's viewpoint is that the separation of R2-Up and R2-Down procurements is the only way to valorize the R2-Down potential. If Elia cannot be convinced that asymmetrical products should be introduced for the full volume from the very beginning, then the Anonymous Respondent proposes to consider an interim

[2] In the Netherlands, for example, the obligation of asymmetric offers has been removed when going to weekly auctions.

solution in which half of the volume is sourced with combined and another half with asymmetric bids and an indivisible bid size of maximum 5 MW.

REstore takes an in-between view and believes that there is some time available for such investigations: the liquidity on the aFRR auctions will only increase with the implementation of a merit order activation, allowing demand-response capacities on one side and renewables on the other side to cover the cost of their activations by putting themselves at the end of the merit order with an activation price of their choice. Until then, splitting aFRR UP and DOWN will probably allow very limited arrival of new capacities.

FEBEG thinks that the market potential of aFRR non-CIPU remains uncertain, and that it is too early for any conclusions or implementation plan. FEBEG encourages Elia to continue experimentation on this matter that will potentially lead to more profound insights, and also realize a cost benefit analysis. For FEBEG, the design of the future procurement of aFRR should be integrated in the current discussion on the new design of aFRR.

ELIA agrees that the benefits of a separate procurement of R2-Up and R2-Down creates a step towards a competitive market once market entrance is effectively possible, and if the new entrants have genuinely asymmetric capabilities. However, as market entrance is yet not fully facilitated, ELIA believes that the short-term procurement costs can only increase as long as certain conditions related to market opening are not met.

ELIA also agrees that the design of aFRR procurement should be considered as part of the broader aFRR design. Therefore, ELIA is of the opinion that an exemption to the Guidelines for Balancing is to be considered. Such an exemption would be removed when its drawbacks (mostly in terms of transparency and price signal) outweigh its benefits (mostly in terms of cost savings).

3.3.2. Bidding obligations

Febeliec supports the implementation of bidding obligations as described for STEP 3 in the study.

FEBEG is of the opinion that the discussion on bidding obligations for separate procurement of aFRR-up and aFRR-down is not mature, that disadvantaging CCGT's in bidding obligations should be avoided and that market participants should not be obliged to offer the same capacity in different products if only one of the products is really suitable for the capacity they offer. Bidding obligations for aFRR-up and aFRR-down would also

exponentially increase the number of scenarios to offer, impact the quality of the costing/pricing of the offers. These impacts should also be identified and quantified in a preliminary cost benefit analysis. FEBEG suggests as a quick win to stimulate participants to offer with a higher granularity (5 MW for instance). If Elia however decides to implement bidding obligations, the FEBEG agrees this must be done after a split of FCR and aFRR procurement in order to avoid 3-dimensional bidding obligations.

For the Anonymous Respondent, indivisible bid blocks of 25 MW are (too) large and hinder entrance of new players. He therefore thinks that reducing this indivisible block size should be taken up in the road map.

ELIA recognizes that all the details of the potential bidding obligations are not yet fully set. However, in ELIA's opinion, the principle of applying bidding obligations (similar as currently for FCR products and aFRR symmetrical product) is a positive development for the opening of the market, which does not result in insurmountable operational constraints once aFRR is no longer procured together with FCR.

On the contrary, a careful setup of these obligations would enable large and small players to fairly compete. Bidding obligation by nature also address the point of the bid blocks size, as they typically enforce to complement large block bids with other bids having smaller than 25 MW volumes. ELIA underlines that large block bids remain required to efficiently procured assets with fixed spinning costs, and by this reduce the overall procurement costs.

3.4. Sourcing sequence

The study concludes that, in case of a separate procurement, aFRR should be procured prior to FCR. No participant puts this conclusion into question.

Restore, Febeliec and FEBEG also support the proposal by Elia to source upward aFRR before downward. The Anonymous Respondent though considers this idea dangerous, and thinks it cements an advantage for certain technologies.

REstore supports the approach proposed by Elia that targets to organize aFRR auctions before FCR auctions and Day-Ahead. REstore however suggests further investigations are required before deciding of the most appropriate way of sequencing the auctions, notably by a comparison between the proposed model of Elia and the current

organization of the German FCR and aFRR auctions, and how must-run costs for coal units are included in bids.

Taking both short-term cost minimization and system security perspectives, ELIA confirms that the ideal auction sequence is aFRR (up before down), followed by FCR and Day-Ahead. This auction sequence is to be further discussed in the re-design of the aFRR market, where also other constraints will need to be considered, in particular the timing of the regional FCR auction. If the liquidity of all products becomes sufficiently ample – which is not expected in the near future – this sequence could be reconsidered.

3.5. Short-term procurement

For FEBEG, the benefits of daily procurement of aFRR are in the study rather qualitative. Apart from the increased operational costs of daily offering instead of weekly, there could also be higher costs integrated in the daily offering as a result of the fact that certain (fixed/startup) costs cannot be spread over the week anymore. This is especially the case when CCGT's remain the leading technology for aFRR. FEBEG therefore pleads to maintain the local FCR auction on a weekly basis in order to reduce administrative burden and operational complexity.

The Anonymous Respondent disagrees: while the study states that there are extra operational costs for the supplier when daily bids are introduced, this respondent has no significant extra costs for daily bids and strongly welcomes if daily bids (and preferably block bid) products are introduced.

Febeliec can support short-term procurement "to the extent possible", insofar this is economically efficient and does not create an important additional operational burden to market actors. For Febeliec, the change towards daily processes should indeed, as indicated by Elia, be executed gradually and with caution.

ELIA confirms that the frequency of aFRR auctions is contemplated more in depth as part of the broader R2 redesign process. With respect to FCR auctions, ELIA considers (see §3.6 below) that the step where FCR is procured separately from aFRR is likely to happen simultaneously with the full sourcing of FCR needs via the Regional Cooperation, where the auction frequency will become daily in order to reduce the operational burden.

3.6. Implementation steps

REstore agrees with the proposed sequence of STEPS 1,2,3: Keeping STEP 1 and STEP 2 allows to go for a quick split of FCR and aFRR procurement, leaving then some time to adapt the market in order to move to regional procurement only for FCR.

FEBEG on the contrary emphasize the high number of implementation projects and advises to skip STEP 1 and directly include Belgian FCR needs in the regional auction.

REstore does not see a clear impact of STEP 3 and the mitigation measures on the procurement of aFRR before going to TARGET. For REstore, the game changer for participation of new assets to aFRR will be the merit order-based activation with an activation price. Once this is in place, interest of STEP 3 is more uncertain

FEBEG also wants to remind that the main objective should be to improve overall welfare. Therefore, not only short term - cost reductions - but also long term - investment climate - impacts need to be taken into account. FEBEG supports the idea of developing a target model as this enhances coherency and focus, but also wants to point out that this target not necessarily needs to be reached if along the way the benefits of the target model do not outweigh the downsides (short term versus long term). More generally, FEBEG is of the opinion that the discussion separate procurement of aFRR-up and aFRR-down is not mature and encourages Elia to further experiment and investigate before considering implementation.

FEBEG hopes that the market landscape will evolve as such that an efficient procurement of Belgian FCR needs through the daily regional auction will become possible. Nevertheless, FEBEG considers it of utmost importance that Elia – prior to the implementation of the target model – clearly demonstrates with a cost-benefit-analysis that (1) the implementation of the target model effectively increases welfare; and (2) the markets are sufficient liquid.

ELIA does not believe that keeping STEP 1 inherently allows a quicker separation of FCR and aFRR, especially because the entire process for Regional procurement already exists and procuring the entirety of Belgian FCR needs via the FCR cooperation (i.e. going directly to STEP 2) is relatively easier to implement. For ELIA, the key benefit of STEP 1 would be to keep the local FCR asymmetric products to foster competition at local level.

Though, the latest FCR market developments show a tendency of reduced selection of asymmetric bids. Would this trend confirm over time, the intrinsic need for STEP 1 could vanish and therefore be avoided.

The need to distinguish STEP2 and STEP3 relies on the lack of maturity of the bidding obligations (and possibly modifications of the STAR algorithm). ELIA estimates that setting up these rules is not necessarily on the critical path. The pros and cons of merging STEP2 and STEP3 into a single step will therefore be explained more in details in the final report of the study (chapter 4.2).

ELIA however currently still estimates that an intermediate step, where FCR is fully procured regionally, but where symmetrical aFRR are still possible (in complement asymmetrical products, and possibly with bidding obligations and possibly a more transparent bid selection algorithm), could still be useful at least during the period where R2 market develops. ELIA therefore contemplates to request an exemption to the guidelines for Balancing in this respect, which will necessitate all relevant argumentation. Whether this exemption will persist over time remains open at this stage, and will be reevaluated regularly once in place.

3.7. Additional comments received

This last chapter summarizes other inputs received during the consultation which – despite their relevance – does not directly relate the specific points being studied in the report under consultation.

Anonymous Respondent sees a strong risk that the technical requirements for pools in Belgium to participate in R2 will further favor large central units and make the participation with pools very difficult (baselines, requirement to communicate per unit data). He for instance relates to transfer of energy: the current framework for transfer of energy does not allow generation units (unless behind a net offtake point) to participate. Almost all market parties – according to this respondent – agree that this is an absurd restriction which is alone due to an unfortunate wording in the energy law. It is of utmost importance that this is corrected, otherwise non-CIPU units will not be able to participate in aFRR via BSPs. According to the anonymous responded, this perception of uncertainty on whether and when the R2 market will be opened does not give security for the necessary investments to develop an R2 pool. He cannot follow the line of argumentation that leads to

the reluctance to open the R2 market. The Belgian energy market has of course some national characteristics, but it is as such not unique, and lessons learnt elsewhere can be applied in Belgium as well. In various countries, it has been proven that there is significant potential to deliver R2 with other technologies than CCGTs. The integration of new assets leads to a more diverse and more reliable delivery pool and has even shown to significantly reduce prices.

Anonymous respondent also refers to **Rules for pooling:** The current aFRR framework is designed to accommodate CCGTs as clearly stated throughout the study. (This is for instance reflected in the fact that the activation price caps are based on the clean spark spread). Pools gathering different decentralized technologies are very different from central CCGTs in many ways. If their participation in the market is desired by Elia, it is important that upon opening the market the General Framework for aFRR is adapted to account for these characteristics. For instance: It should be considered whether it is necessary to collect real time data per delivery point. Or: The baseline methodology should be adapted, and a real-time or close-to-real-time baseline should be considered.

Anonymous respondent therefore considers aFRR as a closed market. Today it is not only impossible to offer the service with a pool of smaller units on this market, but additionally almost all technical requirements, baselines, price caps, and activation corridors are designed to accommodate CCGT units. Other units are currently not foreseen in this framework. This results in a market that is today taken hostage by a small number of players. Anonymous Respondent is therefore convinced that the decision to not open the R2 market or to open the R2 market as slow as currently planned makes Elia strongly dependent on CCGTs. If CCGTs leave the market for whatever reason, the prices of R2 will ramp up while system security is at risk.

Regarding the sequence of procurement, for FEBEG, if all reserve tenders would be daily, it would be worthwhile to investigate the impact of a procurement of one or more products after the day ahead auction.

On the evolution of the dependence on CCGTs, Febeliec, despite not agreeing with the conclusions of the Elia 2050 study, would like Elia to be coherent in its approach throughout its multiple studies. If indeed a large number of new CCGTs will have to be built to maintain security of supply in Belgium in the near future, as Elia propagates in its study, the dependence on CCGTs for aFRR (and FCR) should not be a real concern for Elia, as a much larger number of potential sources will exist in the Belgian system (although market concentration with a limited number of operators could create its own problems). Elia would

like to clarify that the foreseen adaptations in market rules aim to avoid being dependent from a single technology that is often out of the money (CCGTs in the Belgian case). If this hypothesis changes in the future then the aforementioned problem could be reduced. However, the probability of this is not high enough and Elia is convinced that a market that is equally favoring multiple technologies is still valuable. The final report has been updated based on this input (introduction and chapter 3.1).

On paid-as-cleared versus paid-as-bid, Febeliec refers to its answer on the consultation by Elia on this topic and reiterates its position that providing balancing services is in most cases the icing on the cake for existing assets and as such these markets should not provide investment signals (linked to paid-as-cleared), but rather remunerate the cost (though paid-as-bid). Nevertheless, Febeliec understands that certain technologies and/or market players are focusing increasingly on this market as one of the main drivers for investment decisions and thus is not completely opposed, as also indicated during the consultation on this topic.

ELIA takes note of these relevant remarks, although not directly related to the very specific discussion points of the study and will therefore consider them more generally for the future development of aFRR.

Elia also understands that the discussions on separate procurement of FCR and aFRR should not be looked at individually but other aspects/evolutions related to aFRR market should be taken into account. Elia has updated the final report accordingly (introduction, chapter 3.4.2 and chapter 4.2).